

REMARKS:

Claims 1-32 are pending. Claims *1, 2, 15, 16, 19-23, 28, and 31* are amended. Figures 1A, 1B, 1E, 2, 4, 5A, 5F, 5H, 5I, and 6 are amended. It is to be appreciated that while reference may be made back to certain parts of the application in this Reply (e.g., page numbers, line numbers, Figs., etc.), that such referencing is not to be interpreted in a limiting manner (e.g., to limit the scope of the claims and/or features therein to the particular portion(s) referenced), but is instead merely done for purposes of explanation, illustration and/or ease of understanding. Reconsideration of the application in light of the above amendment and the following remarks is respectfully requested.

I. SPECIFICATION OBJECTIONS

The specification was objected to for including the following:

1. Inaccurate specification with respect to figures in the drawings
2. A lack of consistency with respect to figures in the drawings

The specification has been reexamined and amended to correct the inconsistencies and inaccuracies with respect to the figures. Withdrawal of this objection is requested for at least the following reasons:

- a.) Page 10, line 10 has been amended from “local bus” to “host bridge”
- b.) The use of reference characters 4 and 128 has been amended throughout the specification to be consistent with the term “host memory”

- c.) The use of reference character 130 has been amended throughout the specification to be consistent with the term “descriptor management system”
- d.) Replacement of “IPsec processor 150” with “IPsec processor 148” on page 29, line 22 is respectfully declined. Figure 2 correctly displays “Ipsec processor 150” and “SA pointer FIFO memory 148”
- e.) Replacement of “IPsec processor 150” with “IPsec processor 148” on page 29, line 26 is respectfully declined. Figure 2 correctly displays “Ipsec processor 150” and “SA pointer FIFO memory 148”
- f.) Page 31, line 14 has been amended from “network port manager 175” to “network port manager 182”
- g.) Page 31, line 21 has been amended from “power management unit 188” to “power management unit 175”
- h.) Page 31, line 24 has been amended from “power management unit 188” to “power management unit 175”

Accordingly, withdrawal of this objection is respectfully requested

II. DRAWING OBJECTIONS

The drawings were objected to for including reference characters not mentioned in the description under 37 CFR 1.84(p)(5). The drawings were also rejected for reasons of clarity. Withdrawal of this objection is requested for at least the following reasons:

The description has been amended to include references to (Figure 1C, 40) and (Figure 1D, 58).

Fig. 1E has been relabeled to reflect the change in reference character 130 associated device from DMU to DESCRIPTOR MANGEMENT SYSTEM.

Fig. 2 has been relabeled to reflect the change in reference character 130 associated device from DESCRIPTOR MANGEMENT UNIT to DESCRIPTOR MANGEMENT SYSTEM.

Fig. 2 has been relabeled to reflect the change in reference character 124 associated line boldness to clarify the boundaries of the device.

Accordingly, withdrawal of this objection is respectfully requested.

III. CLAIM OBJECTIONS

Claims 2, 16, 19, 22, 28 and 31 were objected to for informalities leading to antecedental basis issues. Withdrawal of this objection is requested for at least the following reasons:

- a.) Claim 2, line 3 has been amended to replace “a lower limit” with “the lower limit”
- b.) Claim 2, line 3 has been amended to replace “a number” with “the number”
- c.) Claim 2, line 7 has been amended to replace “a full cache” with “the full cache”
- d.) Claim 16, line 4 has been amended to replace “a full cache” with “the full cache”
- e.) Claim 19, line 2 has been amended to replace “the sum” with “a sum”
- f.) Claim 19, line 2 has been amended to replace “the number” with “a number”
- g.) Claim 22, line 3 has been amended to replace “a lower” with “the lower”
- h.) Claim 22, line 6 has been amended to replace “a full cache” with “the full cache”
- i.) Claim 28, line 2 has been amended to replace “the difference” with “a difference”
- j.) Claim 31, line 4 has been amended to replace “a full cache” with “the full cache”

- k.) Claim 31, line 5 has been amended to replace “a first” with “the first”

Accordingly, withdrawal of the objections is respectfully requested.

IV. REJECTION OF CLAIMS 1-32 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

In rejecting the claims as failing to comply with the enablement requirement, more specifically not describing in detail the limitations of claim language used in claims 1, 15, 20 and 21. Applicant respectfully disagrees. The use of “full cache line write” and the description thereof regarding “how a peripheral can access and write data to a cache” is inherently described within Figures 1A – 7D. The specification also clearly outlines the process in elaborate detail with exemplary examples. The description of this process can be outlined from the specification as follows:

- a.) For transfer of incoming data form the peripheral 2 to host 7 (pg 13, line 23 – pg 14, line – 25)
- b.) For transfer of outgoing data from the host 7 to the peripheral 2 (pg 18, line 5 – 26)
- c.) Incoming data transfer form the peripheral 2 to the host 7 as illustrated by Fig. 1D (pg 18, line 27 – pg 19, line 22)
- d.) Fig. 1F illustrates an exemplary method 80 for transferring data entries from a peripheral to a data queue in host memory, which may be employed in any type of peripheral (pg 21, line 26 – pg 24, line 25)

The limitations of claim language of 1, 15, 20 and 21 as described in the office action is outlined above and therefore displays that the detailed description satisfies the enablement requirement. The claim language and use of the term cache line write is

disclosed in the specification such that one skilled in the art would know how a peripheral device can access and write data to a cache without undue experimentation.

Accordingly, the application meets the enablement requirement and withdrawal of the rejection is respectfully requested.

VII. REJECTION OF CLAIMS 1-32 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 1, 20 and 21 were rejected under 35 U.S.C. § 112, second paragraph for being indefinite and distinctly claiming the subject matter. Claims 1, 20, and 21 have been amended to address the highlighted issues in the Office Action. Claims 3-19, 22-32 depend on claims 1, 20 and 21 which are now believed to be in compliance with 35 U.S.C. §112, second paragraph.

Accordingly, withdrawal of this rejection is respectfully requested.

VI. REJECTION OF CLAIMS 1-32 UNDER 35 U.S.C. § 103(a)

Claims 1, 20 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pham et al. (US 6,212,593 B1). Further, dependant claims 2-19 and 22-32 are rejected under 35 U.S.C § 103(a) as being unpatentable over Pham et al. (US 6,212,593 B1) and in further view of Garrett et al. (US 6,212,593 B1). Withdrawal of this rejection is respectfully requested for at least the following reasons.

1.) Pham does not teach that the first value is related to a number of the current cache line size, as recited in claims 1, 20, and 21.

Independent claim 1, 20, and 21 provides for selectively transferring a current data entry to the data queue using a full cache line write if the lower limit is greater than or equal to a first value, ***wherein the first value is related to a current cache line size***, thereby preventing an overwriting of an unprocessed data entry in the data queue. Pham teaches that the overwriting of unprocessed data is controlled by the use of ownership flags Fig. 256. After a buffer is filled, the OWN bit is set until it is cleared by the SmartDMA unit after the transmitting of the buffer (*column 7, lines 43-52*). Therefore, ***the overwriting of an unprocessed data entry in the data queue of Pham is not controlled by the final value, but by the OWN bit.***

Clearly then, Pham does not teach the above feature of claim 1, 20, and 21 the secondary references do not remedy the deficiencies in Pham. Accordingly, withdrawal of the rejection is respectfully requested.

V. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP769US.

Respectfully submitted,
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